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10/516,672

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24581N2/PCT

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01/24/2008

EXAMINER

BOYER, RANDY

ART UNIT

PAPER NUMBER

1797

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/516,672

**Applicant(s)**

SCHULZE-TRAUTMANN ET AL.

**Examiner**

Randy Boyer

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 15 February 2006.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 15 February 2006 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the citation of the non-patent literature document does not include the relevant page numbers of the publication or date of publication. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).
2. Examiner notes that the above-referenced Information Disclosure Statement has been considered in part as evidenced by Examiner's initialing of those references considered. However, the citation of the non-patent literature document is noncompliant with 37 CFR 1.98(b)(5). Consequently, this reference has not been considered by Examiner.

***Duplicate Claims Warning***

3. Applicant is advised that should claim 47 be found allowable, claim 48 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 112 / 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With respect to claim 30, Applicant purports to claim a microcrystalline paraffin "characterized by use properties" between microcrystalline paraffins based on petroleum and FT paraffins used to prepare the claimed microcrystalline paraffin. Examiner finds such claim language indefinite because the person having ordinary skill

in the art would not be able to discern exactly what "use properties" Applicant refers to or is intended to be encompassed by such language.

8. Claims 32 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claims 32 and 45 are rejected under 35 U.S.C. 112, second paragraph for having a broader range or limitation and narrow range or limitation in the same claim.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of Ex parte Steigewald, 131 USPQ 74 (Bd. App. 1961); Ex parte Hall, 83 USPQ 38 (Bd. App. 1948); and Ex parte Hasche, 86 USPQ 481 (Bd. App. 1949).

9. With respect to claim 32, the claim recites the broad recitation "a zeolite," and the claim also recites "preferably a  $\beta$ -zeolite" which is the narrower statement of the range/limitation.

10. With respect to claim 45, the claim recites the broad recitation "a solidification point range from 70 to 105°C," and the claim also recites "preferably with solidification points of 70, 80, 95, or 105°C" which is the narrower statement of the range/limitation.

11. Claims 47-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claims 47-50 provide for the "use of microcrystalline paraffins . . . in the pharmaceutical or cosmetics sector or in the food industry," but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Likewise, claims 47-50 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 102 / 35 USC § 103***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 25-50 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wittenbrink (WO 01/74969 A2).

17. With respect to claim 25, Wittenbrink discloses a microcrystalline paraffin as solid product, prepared by catalytic hydroisomerization of FT paraffins having a carbon chain length distribution greater than 20 (see Wittenbrink, Abstract; and page 5, first paragraph).

18. With respect to claim 26, Wittenbrink discloses wherein the paraffin may have a needle penetration value of less than 10 mm (see Wittenbrink, Table 2).

19. With respect to claims 27 and 28, Wittenbrink discloses wherein the paraffin is free of aromatics, heterocyclic compounds, and naphthenes (see Wittenbrink, entire disclosure; and page 6, second paragraph).

20. With respect to claim 29, Wittenbrink discloses wherein the paraffin is created via a process for hydroisomerization (see Wittenbrink, pages 6-10).

21. With respect to claim 30, Wittenbrink discloses wherein the paraffin is one derived from FT paraffins (see Wittenbrink, page 5, first paragraph; and page 15, second paragraph).

22. With respect to claim 31, Wittenbrink discloses a process for preparing a microcrystalline paraffin by catalytic hydroisomerization comprising the steps of: (a) use of FT paraffins as starting material, having greater than 20 carbon atoms (see Wittenbrink, page 5, paragraph 1); (b) use of a catalyst (see Wittenbrink, page 8, second paragraph); (c) use of a process temperature above 200°C (see Wittenbrink,



page 7, second paragraph); and (d) action of pressure in the presence of hydrogen (see Wittenbrink, page 7, second paragraph).

23. With respect to claims 32 and 41, Wittenbrink discloses the use of any zeolite catalyst support (see Wittenbrink, page 8, second paragraph).

24. With respect to claims 33-37, Wittenbrink discloses wherein the process may be carried out at temperatures in the range of 230°C to 270°C and pressures in the range of 3 MPa to 8 MPa (see Wittenbrink, page 7, second paragraph).

25. With respect to claims 38 and 39, Wittenbrink discloses wherein the feed ratio of hydrogen to FT paraffin may be in the range of 250:1 to 600:1 m<sup>3</sup>/m<sup>3</sup> (see Wittenbrink, page 8, table).

26. With respect to claim 40, Wittenbrink is not specifically limited with respect to the amount of catalyst to be used (see Wittenbrink, entire disclosure).

27. With respect to claims 42-44, Wittenbrink discloses wherein the catalyst may be platinum with a metals contents of between 0.5 wt% and 20 wt% (see Wittenbrink, page 8, second paragraph).

28. With respect to claims 45 and 46, Wittenbrink discloses wherein the FT paraffin used has carbon atoms of 20 or greater and wherein short-chain constituents may be removed prior to the step of hydroisomerization (see Wittenbrink, page 6, second and third paragraphs).

29. With respect to claims 47-50, Wittenbrink discloses the use of paraffin waxes in the pharmaceutical, cosmetics, and food industries (see Wittenbrink, page 3, first paragraph; and page 4, third paragraph).

30. Claims 25-50 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoek (US 2004/0199040). Alternatively, claims 25-50 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoek (US 2004/0199040), as evidenced by Eilers (EP 668342 A1) and/or Bertaux (EP 776959 A2).

31. With respect to claim 25, Hoek discloses a microcrystalline paraffin as solid product, prepared by catalytic hydroisomerization of FT paraffins (see Hoek, Abstract; and page 2, paragraph 15).

Hoek does not explicitly disclose wherein the FT paraffins have a carbon chain length distribution in the range from 20 to 105 at temperatures above 200°C.

However, Hoek discloses wherein the feed material for production of the microcrystalline paraffins is obtained from a FT synthesis process, e.g. that described by Eilers and Bertaux (see Hoek, page 2, paragraph 15). In this regard, Examiner notes that the FT synthesis processes disclosed by both Eilers and Bertaux produce paraffins having a carbon chain length distribution greater than 20 (see Eilers, page 6, lines 12-23) (see Bertaux, column 3, lines 15-29).

Therefore, Hoek (by reference to both Eilers and Bertaux as sources of acceptable feed material) inherently discloses wherein the FT paraffin feed material has a carbon chain length distribution of greater than 20.

32. With respect to claim 26, Hoek discloses wherein the paraffin has a needle penetration value of less than 10 mm (see Hoek, Table 1).

33. With respect to claims 27 and 28, Hoek discloses wherein the paraffin is substantially free of aromatics, heterocyclic compounds, and naphthenes (see Hoek, page 2, paragraph 19).

34. With respect to claim 29, Hoek discloses wherein the paraffin has a proportion by weight of isoalkanes greater than that of normal alkanes in the paraffins (see Hoek, page 2, paragraph 19; and Table 1).

35. With respect to claim 30, Hoek discloses wherein the paraffin is one derived from FT paraffins (see Hoek, page 1, paragraph 14; and page 2, paragraph 19).

36. With respect to claim 31, Hoek discloses a process for preparing a microcrystalline paraffin by catalytic hydroisomerization comprising the steps of: (a) use of FT paraffins as starting material, having greater than 20 carbon atoms (see discussion *supra* at paragraph 31); (b) use of a catalyst (see Hoek, page 1, paragraphs 6-8); (c) use of a process temperature above 200°C (see Hoek, page 1, paragraph 7); and (d) action of pressure in the presence of hydrogen (see Hoek, page 1, paragraph 7).

37. With respect to claims 32 and 41, Hoek discloses the use of any suitable amorphous silica-alumina carrier (e.g. a zeolite) with a majority of pores having diameters in the mesoporous range as a support material for a metal of transition group 8 (see Hoek, page 1, paragraphs 8-10).

38. With respect to claims 33-37, Hoek discloses wherein the process may be carried out at temperatures in the range of 230°C to 270°C and pressures in the range of 3 MPa to 8 MPa (see Hoek, page 1, paragraph 7).

39. With respect to claims 38 and 39, Hoek discloses wherein the feed ratio of hydrogen to FT paraffin may be in the range of 250:1 to 600:1 m<sup>3</sup>/m<sup>3</sup> (see Hoek, page 1, paragraph 7).

40. With respect to claim 40, Hoek is not specifically limited with respect to the amount of catalyst to be used (see Hoek, entire disclosure).

41. With respect to claims 42-44, Hoek discloses wherein the catalyst may be platinum with a metals contents of between 0.1 wt% and 2.0 wt% (see Hoek, page 1, paragraph 8).

42. With respect to claims 45 and 46, Hoek discloses wherein the FT paraffin used has a solidification point of 60°C or greater (see Hoek, page 1, paragraph 14) and wherein short-chain constituents may be removed prior to the step of hydroisomerization (see Hoek, page 2, paragraph 17; and Example 1).

43. With respect to claims 47-50, Hoek discloses the use of paraffin waxes in the pharmaceutical, cosmetics, and food industries (see Hoek, page 1, paragraph 4; and page 2, paragraph 18).

### ***Double Patenting***

44. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

45. Claims 25-27, 29, and 31-50 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10/477910. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 25-27, 29, and 31-50 of the instant application are substantially similar to claims 1-21 of copending Application No. 10/477910 in terms of both subject matter and scope.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Boyer whose telephone number is (571) 272-7113. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 7:00 P.M. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola, can be reached at (571) 272-1444. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RPB

  
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